

## CLAIMS:

1. A method for the handling of a recorded data stream and associated linear application, comprising the steps of:

commencing linear real-time playback of the data stream and commencing running of the linear application from a starting point thereof;

5 on entering a non real-time playback phase, mapping select frames from the data stream using a mapping scheme to create an interactive trick play stream; and

mapping events from the linear application into the interactive trick play stream using said mapping scheme.

10 2. The method according to claim 1, wherein if the event occurs between a first and second frame in the recorded data stream, the event is mapped so as to occur between the mapped first and second frame in the interactive trick play stream.

15 3. The method according to claim 1, wherein the event is mapped using the following mapping scheme

$$t(E_x') = t(I_0) + (t(E_x) - t(I_0))/n$$

where n is a fast forward factor,  $t(I_0)$  is the time trick play is started and  $E_x$  is the event.

20 4. The method according to claim 1, wherein any event scheduled to occur in a group-of-pictures is fed to the linear application together with a mapped I-frame during the non real-time feedback.

5. The method according to claim 1, wherein the event of the linear application is executed using no user input.

25

6. The method according to claim 1, further comprising the steps of:  
determining when an event for the linear application will occur;  
pausing the linear application prior to the event;  
unpausing the linear application prior to the event; and

executing the event of the linear application.

7. The method according to claim 6, wherein the linear application is paused and unpause using application control codes.

5

8. The method according to claim 7, wherein the application control codes are received from an Application Information Table.

9. An apparatus for the handling of a recorded data stream and associated linear application, comprising:

means for commencing linear real-time playback of the data stream and commencing running of the linear application from a starting point thereof;

means for mapping select frames from the data stream using a mapping scheme to create an interactive trick play stream; and

15 means for mapping events from the linear application into the interactive trick play stream using said mapping scheme.

10. The apparatus according to claim 9, wherein if the event occurs between a first and second frame in the recorded data stream, the event is mapped so as to occur between the 20 mapped first and second frame in the interactive trick play stream.

11. The apparatus according to claim 9, wherein the event is mapped using the following mapping scheme

$$t(E_x') = t(I_0) + (t(E_x) - t(I_0))/n$$

25 where n is a fast forward factor, t(I<sub>0</sub>) is the time trick play is started and E<sub>x</sub> is the event.

12. The apparatus according to claim 9, wherein any event scheduled to occur in a group-of-pictures is fed to the linear application together with a mapped I-frame during the non real-time feedback.

30

13. The apparatus according to claim 9, wherein the event of the linear application is executed using no user input.

14. The apparatus according to claim 9, further comprising:

means for determining on entering a non linear playback phase when an event for the linear application will occur;

means for pausing the linear application prior to the event;  
means for unpauseing the linear application prior to the event; and  
means for executing the event of the linear application.

5

15. The apparatus according to claim 14, wherein the linear application is paused and unpauseed using application control codes.

10 16. The apparatus according to claim 15, wherein the application control codes are received from an Application Information Table.

17. A method for the handling of a recorded data stream and associated linear application, comprising the steps of:

15 commencing linear real-time playback of the data stream and commencing running of the linear application from a starting point thereof;  
on entering a non real-time playback phase, mapping select frames from the data-stream using a mapping scheme to create an interactive trick-play stream; and  
pausing and unpauseing the linear application using application control codes  
20 received from an Application Information Table.